



Best Practices for Small Bus Maintenance

How to Develop a Program for Small Passenger Service Vehicles

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Overview

- ✦ Introductions
- ✦ Program framework
- ✦ Measuring life cycle costs
- ✦ Developing a maintenance program
- ✦ Resources
- ✦ Workshop evaluation



Introductions

- ☀ Meet the instructors
- ☀ Tell us about yourself
 - ☀ Name
 - ☀ Organization
 - ☀ Number of vehicles in your fleet
 - ☀ Type of service you provide
 - ☀ Your expectations for today



Program Framework – Background

- ✦ How was the framework developed?
- ✦ Who was on the expert panel?
- ✦ What were the guiding principals?
- ✦ What is lowest life cycle cost and how will this save our organization money?

Program Framework – Mission Statement

- ✦ Should be developed as a group effort
- ✦ Supports organization's mission
 - ✦ Represents the role of maintenance
 - ✦ Provides direction
 - ✦ Demonstrates organization's commitment



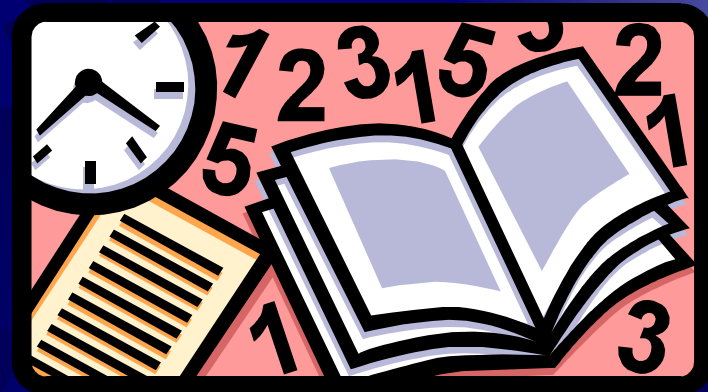


Program Framework - Strategies

- ✱ Graduated preventative maintenance (PM) program
 - ✱ Based on the manufacturer's recommendations
 - ✱ Modified to reflect local conditions

Program Framework - Strategies

- ☀ A system to identify, track, and record maintenance activities and costs
 - Work order system
 - Excel spreadsheet
 - Other manual tracking methods



Program Framework - Strategies

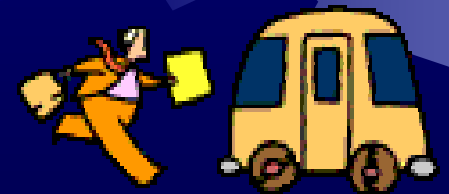
- ✦ A system to authorize, direct, and control maintenance activities
 - ✦ Who decides when vehicles are due for service?
 - ✦ Who authorizes maintenance work?



Program Framework - Strategies

☀ A process to oversee work done by contractors

- Do you have your own mechanics or use a local auto shop?
- Do contract service providers maintain your equipment?
- How do you know if they're doing their job?
 - Have you seen their records?
 - Have you inspected the vehicle(s)?
- Why is it important?



Program Framework - Strategies

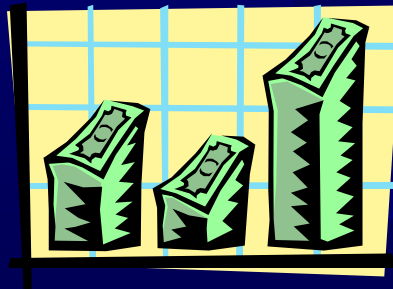
☀ Warranty recovery

- ☀ Do you have a process to ensure you recover the cost of warranty repairs?
- ☀ What should the process include?
- ☀ Are the mechanics certified to make warranty repairs?



How to Measure Life Cycle Costs

- ★ What are the life cycle costs (LCC)?
- ★ How will analyzing LCC benefit my organization?
- ★ What is the cost model?
 - ★ What are the components?
 - ★ How does it work?
 - ★ Can I modify the cost model to meet my needs?



How to develop a program

- ✱ Open up you owner's manuals
- ✱ Review the manufacturer's recommendations
- ✱ Identify your local conditions and types of service you provide
- ✱ Determine your service intervals



How to develop a program

- ✱ Design your inspection sheets
- ✱ Develop your tracking sheets
- ✱ Develop pre/post trip inspection criteria
- ✱ Develop a system to report defects
- ✱ Put your program in writing
- ✱ Don't hesitate to ask for help





Resources

ASK CARLA
SHE KNOWS
EVERYTHING!

Resources

- ✦ Electronic samples - provided to all workshop participants
 - Sample plan
 - Sample forms
 - Life cycle cost analysis tool
- ✦ Owner's manuals

Resources

☀ WSDOT

- ☀ Guide to Preparing Your Transit Asset Management Plan – www.wsdot.wa.gov/transit
- ☀ Technical Assistance - Barb Savary, (360)705-7926 or savaryb@wsdot.wa.gov

☀ Local Transit Agencies

- ☀ Consult your Public Transportation Directory



Workshop Evaluation

- ✴ Please let us know what you think
- ✴ Did we meet your expectations?
- ✴ Would you like more on this topic?